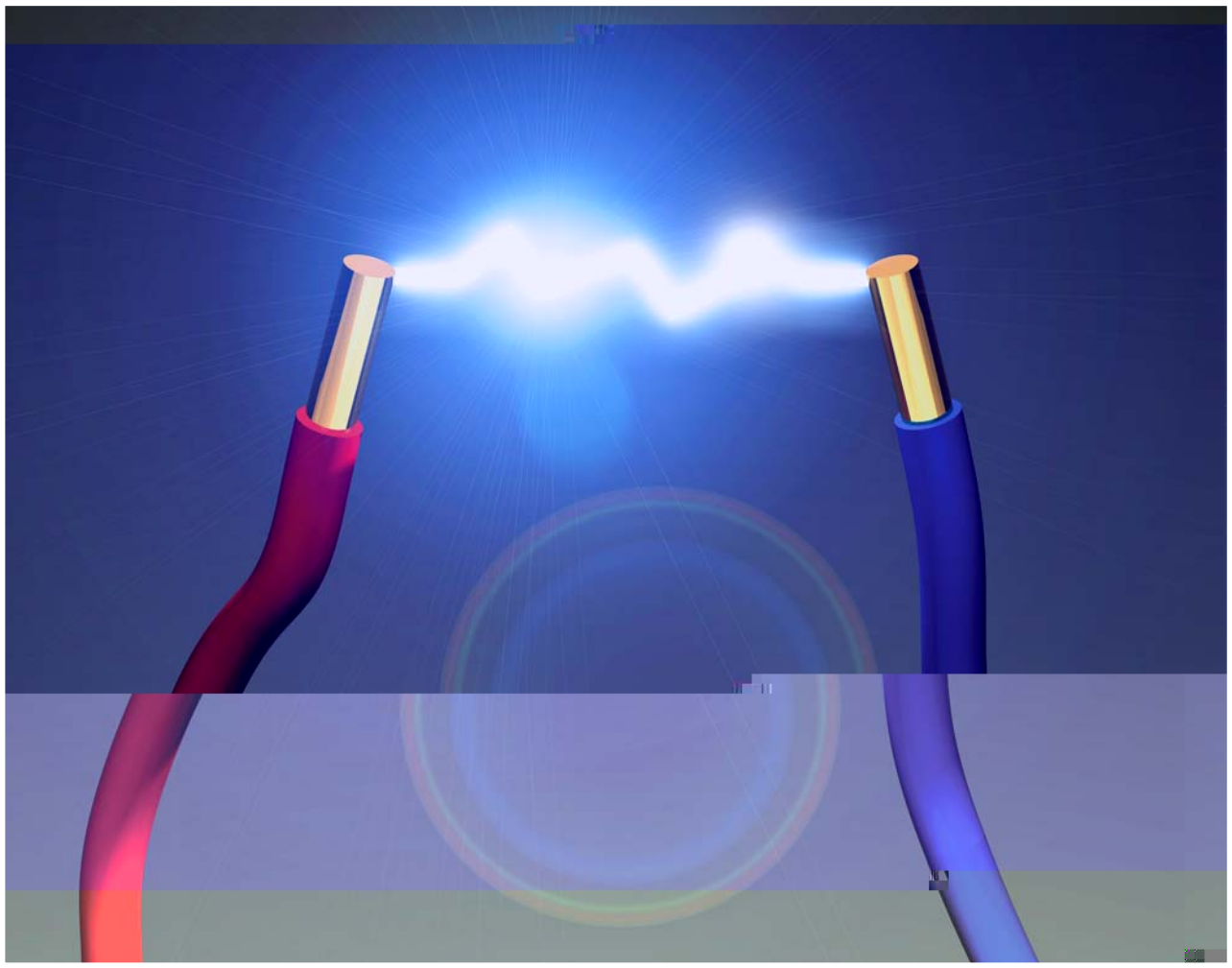
LANCIER Monitoring

# Cable Network Transparency

## Detect, locate and report Distribution Network Faults



*Save Time and Cost with Online Monitoring!*

# Online Monitoring

## *saves time and costs locating faults in distribution networks*

Faults in medium-voltage power grids require instant fault location. Mechanics have to approach every distribution station one after another to check the short-circuit indicators. Thus precious time is wasted until the fault is located.

Other common solutions are expensive or not compatible to actual report and telecontrol procedures.

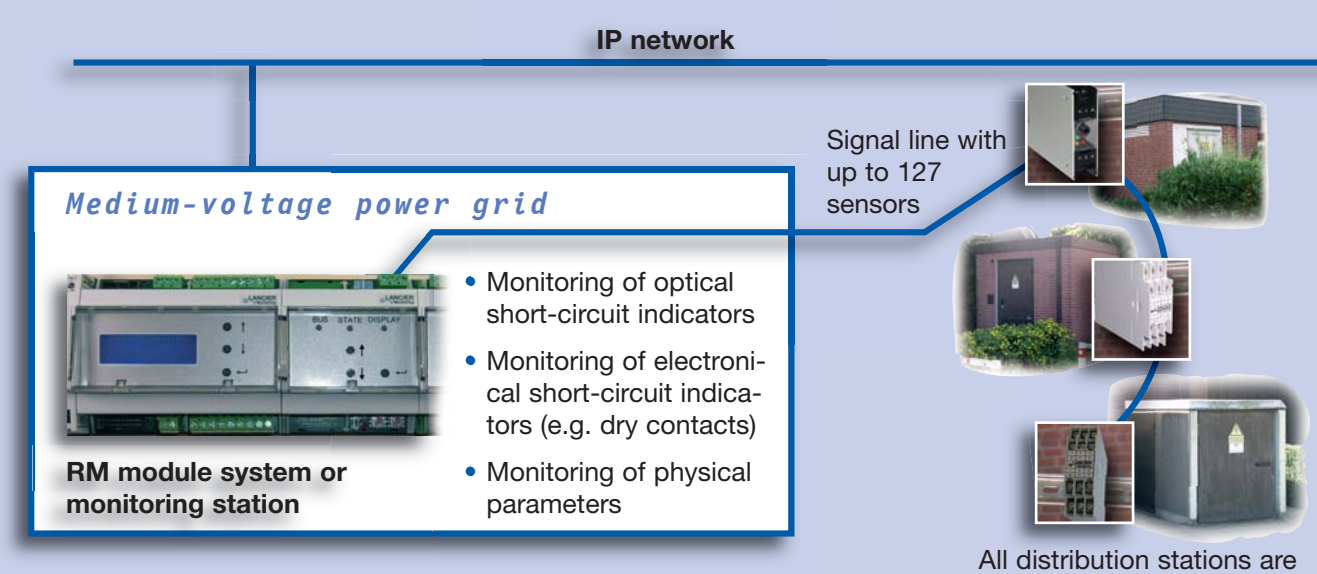
## *The efficient Solution: LANCIER Monitoring*

The LANCIER Monitoring System is particularly suitable for the easy and very cost effective monitoring of signalling contacts of indicators and switches. No matter whether they are equipped with dry contacts or optical outputs.

It also collects analogue data like temperature, voltage levels, humidity and so on.

**The LANCIER Monitoring Solution**

- Transmission on long-distance signal and telecommunication lines
- Remote power supply
- Up to 127 measuring points per line
- Easy installation
- Interface to telecontrol
- Instant fault indication and location
- Fault location approach without time loss (delay)



## Little efforts

Installation work in each distribution station is reduced to a minimum.

A medium-voltage power grid as specific example: the dry output of a short-circuit indicator is connected to a contact sensor. The sensor uses an available signal or telecommunication line as LANCIER Monitoring Tx-bus for data transmission and power supply.

The monitoring of a complete network may be realised by several lines radiating from the control center. A maximum of 127 sensors can be connected to each line.

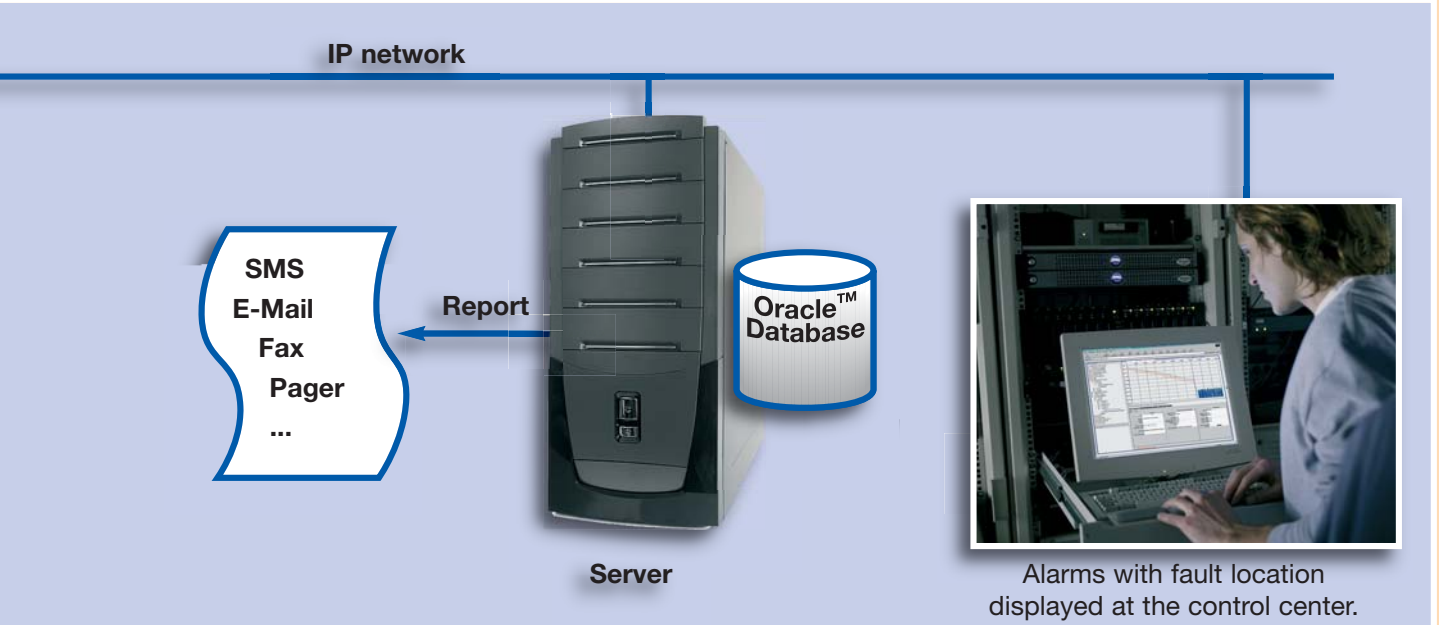
## Open-minded for future tasks

The modular structure of the LANCIER Monitoring System offers a wide range of monitoring tasks above and beyond pure contact surveillance.

As an example, additional sensors might collect and transmit to the control center further relevant data of a distribution station like the state of low voltage switches, transformer temperatures, battery voltages and so on.

## Talk to us

We like to point out the details to you personally. If required we provide a complete project planning in cooperation with you.



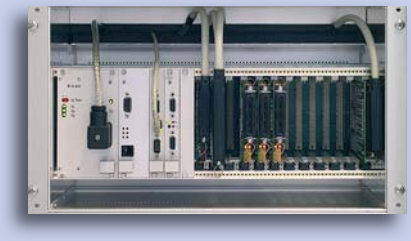



Alarms with fault location displayed at the control center.

LANCIER Monitoring

# Hardware
## *for power grid monitoring:*

### *Monitoring Stations*



**RTU**

IEC-board based universal platform for permanent monitoring.

It collects, stores and evaluates all measuring data and forwards them to the control center.

**MUX 101-DW and Mod 101-DW**

Monitoring stations for special measuring tasks.

They collect,and store all measuring data and forward them to the control center.

MUX 101-DW: Ethernet
Mod 101-DW: Modbus

**RM Module System**

Monitoring system on DIN rail for special measuring tasks.

It collects, stores and evaluates all measuring data and forwards them to the control center.

### *Sensors*

**CTxA**

Contact sensor for the reading of contact conditions (e. g. open / closed) of short-circuit indicators with dry contacts and others.

**LID-TxA-S**

Sensor for the reading of optical signals of for instance short-circuit direction indicators.

The LID-TxA-S indicates the following conditions:
- flashing red signal
- flashing green signal with a preceeding short red reference impulse
- no optical signal pending

**and other sensors**
for physical parameters like temperature, humidity, voltage levels etc.

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Änderungen vorbehalten.

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